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Application No.: 10/669,403
Docket No.: UC0315USNA

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REMARKS*Status of the Application*

Claims 15, 22 and 23 are pending. Claims 15 and 23 are rejected under 35 U.S.C. § 102. Claim 22 is rejected under 35 U.S.C. § 103. Claims 15 and 23 are provisionally rejected under the doctrine of nonstatutory double patenting over a co-pending application.

Claim Rejections - 35 U.S.C. § 102

Claims 15 and 23 stand rejected under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent 5,196,140 ("Poetsch"). The Examiner's finding that the at least two liquid-crystalline components recited in the Abstract of Poetsch are "active materials" (evidently drawing from that terminology as used and defined in the application) is respectfully traversed. The liquid crystalline components are the base of the dielectric material to which the $R^1-A^2-R^2$ component of Formula Ib is an additive. As stated in Poetsch at Col. 2, lines 20-22, "It has now been found that the compounds of the formula I are outstandingly suitable as additives for diverse dielectrics." It should be noted that Formula Ib is a variation on Formula I, $R^1-(A^1-Z^1)_m-A^2-R^2$, wherein $m = 0$ and therefore the molecule contains only one ring (here, 1,4-phenylene).

The liquid-crystalline materials are explicitly referred to as "base materials" of the dielectric in Col. 7, line 3 of Poetsch. The additives, which are the essence of the invention in Poetsch, are useful because they can be made highly soluble in the base materials and may be used as chiral dopants (Col. 7, lines 3-5) without producing unwanted side effects such as lowering the clear point or adding high vapor pressure (Col. 2, lines 12-15). The additives can confer advantages such as very short switching times while meeting a variety of other diverse demands (Col. 2, lines 3-12).

In short, Poetsch does not disclose the combination of any disclosed additive [of Formula I or the part formulae including Ib or Ia] with an "active material" such as an electroluminescent material, hole injection or transport material, and so on. In Poetsch the additive enhances certain properties of liquid-crystalline materials which are activatable liquid crystals in a discrete layer of a liquid crystal display device. This layer comprises materials such as twisted nematic liquid crystals (see Poetsch at Col. 1, line 59 to Col. 2, line 2) that are activated (twisted, i.e., the shape or orientation of the liquid crystal is altered) by electrostatic forces. This alteration allows varying magnitudes of light to pass (or not pass) through the polarizing filters. This is what gives shape, contrast and definition to characters in LCD display devices.

Manifestly, Poetsch does not disclose a liquid composition (comprising a solution, dispersion or emulsion) of an "active material" (as defined in the application) and a second material. Rather, Poetsch discloses a material that serves as an additive to liquid-crystalline base materials that form the dielectric liquid crystal layer of an LCD display device. Because

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there is no correspondence between the elements of Poetsch and the elements of claims 15 and 23, Poetsch does not anticipate those claims. Applicants respectfully request that these rejections be withdrawn.

Claim Rejection- 35 U.S.C. § 103

Claim 22 stands rejected under 35 U.S.C. § 103(a) as unpatentable over Poetsch. Applicants respectfully traverse this rejection on the grounds set forth in the remarks presented above and in light of the further remarks presented herein. Poetsch is directed to a field that is not analogous to the field of the present application. The properties of the additives in Poetsch, and the teachings regarding substituent properties, are all directed to solubility of the additive in at least two liquid-crystalline components and the manner in which the additive can enhance the performance of the liquid-crystalline dielectric (comprised of the additive and at least two liquid-crystalline components) which dielectric has nematic, cholesteric or smectic properties, properties required for the liquid-crystalline dielectric to function as the liquid crystal layer in an LCD device. There is nothing in the reference to suggest that any additive disclosed therein would be useful as a solvent, or a suspension, dispersion or emulsion medium for semiconductors such as electroluminescent materials, buffers, charge transfer materials, or electrodes. The dielectric (insulating) quality of the materials in Poetsch, if anything, teach away from applying Poetsch's additives in the present claims because in the present claims the material that is otherwise analogous to the additives in Poetsch is used with conductive or semiconductive materials, and the dielectric or insulating property present in Poetsch's liquid-crystalline dielectric would not contribute favorably to desired properties in Applicants' layers such as light emission or charge transfer. Accordingly, Applicants respectfully submit that this rejection be withdrawn.

Nonstatutory DoublePatenting Rejections

Claims 15 and 23 are provisionally rejected under the doctrine of nonstatutory double patenting as being unpatentable over claims 1-5 of copending Application No. 10/669,404. Applicants note that a terminal disclaimer, disclaiming the term of any patent granted on the copending application beyond the term of any patent granted on this application was filed in the copending application on December 1, 2005. Should further action be required in this case, the Applicants will take such action in a timely manner.

CONCLUSION

In view of the foregoing remarks, Applicants respectfully submit that the above referenced application is in condition for allowance and a notice of allowance is earnestly requested, for Claims 15, 22, and 23.

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Respectfully submitted,

A handwritten signature in black ink, appearing to read "J. Lamming", with a long horizontal stroke extending to the left.

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